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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,253	03/07/2002	Kunimasa Shimizu	Q66589	9282

7590 12/14/2006
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3202

EXAMINER

GLASS, RUSSELL S

ART UNIT PAPER NUMBER

3626

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,253

Applicant(s)

SHIMIZU ET AL.

Examiner

Russell S. Glass

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12,17-19,33,53 and 54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12,17-19,33,53 and 54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 13-16,20-32,34-52 and 55-72 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The rejections of Claims 3 and 11, under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement, and under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention are withdrawn based on admissions made in applicant's remarks. Applicant admits that "an automatic determination means which automatically makes examination" is well-known in the art and was not described in the specification because the claimed subject matter is obvious to one of ordinary skill in the art, (Amendment dated October 5, 2006, p. 27, ¶ 3).

2. The rejections of Claims 4, 12, 19 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement are maintained.

As per claims 4, 12, and 19, the claims disclose "weighting the/by individual diagnoses" that is not described in the specification to the extent to allow one of ordinary skill in the art to make or use the invention. In particular, the specification discloses a weighting process that is directed by and controlled by a human. Although the controller is capable of automatically making a determination after the server

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receives an individual diagnosis, the weights must still be assigned to each doctor's diagnosis by a person prior to a determination being made.

3. The rejection of Claim 2 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is withdrawn based upon applicant's amendment dated October 5, 2006.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1, 2, 5, 7, 8, 9, 10, 17, 18, 33, 53, 54 are rejected under 35 U.S.C. 102(e) as being anticipated by Wong et al., (U.S. 6,260,021).**

5. As per claim 1, Wong discloses a medical image reading system comprising:

a plurality of diagnostic clients provided with an image output means which outputs image data to be examined as a visible image, and a diagnosis input means for inputting individual diagnoses obtained on the basis of visible images, (Wong, Abstract, col. 3, lines 30-60; col. 11, lines 29-48) (disclosing processing of various diagnostic images for the purpose of diagnosis by a client/user, such as X-ray, MRI, ultrasound, etc.),

at least one management client provided with a result output means for outputting result of examination obtained on the basis of the individual diagnoses, (Wong, Abstract; Fig. 2; col. 9, line 34-63; col. 11, lines 29-48; col. 13, lines 26-62) (disclosing well-known client/server architecture and object-oriented formats that would send information including the number of diagnostic images and associated results to be transmitted to a management client in the form of an Object Request Broker), and

a server provided with an image storage means and a result storage means which are connected to the diagnostic clients and the management client by way of a network, the image storage means storing image data to be examined and the result storage means storing results of examination obtained on the basis of the individual diagnoses with the results of examination related to the image data, (Wong, Abstract; col. 3, line 60 - col. 4, line 15), wherein

each of the diagnostic clients receives the image data to be examined from the server by way of a network, outputs the image data to be examined through the image output means and sends individual diagnoses input through the diagnosis input means

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for the respective images represented by the image data to be examined to the server by way of the network, (Wong, Abstract; col. 4, lines 15-48),

the server causes the result storage means to store results of examination obtained on the basis of the individual diagnoses sent from the respective diagnostic clients, (Wong, Abstract; col. 11, lines 29-48; col. 12, lines 65 - col. 13, line 62), and

the management client receives the result of examination from the server by way of the network and causes the result output means to output the same, (Wong, Abstract; Fig. 2; col. 9, line 34-63; col. 11, lines 29-48; col. 13, lines 26-62) (disclosing well-known client/server architecture and object-oriented formats that would send information including the number of diagnostic images and associated results to be transmitted to a management client in the form of an Object Request Broker).

6. As per claim 2, Wong discloses a medical image reading system in which said server is further provided with an informing means which, when the server receives a predetermined number of said diagnoses, sends information to the effect that the server has received a predetermined number of said diagnoses to the management client and the management client is provided with an information receiving and output means which receives the information and outputs the same, (Wong, Fig. 2; col. 9, line 34-63; col. 13, lines 26-62) (disclosing well-known client/server architecture and object-oriented formats that would send information including the number of diagnostic images and associated results to be transmitted to a management client in the form of an Object Request Broker).

7. As per claim 5, Wong discloses a medical image reading system in which client is connected by way of a network to a server provided with an image storage means which stores image data to be examined and a result storage means which stores results of examination obtained on the basis of the individual diagnoses, and comprises

a data receiving means which receives the image data to be examined from the server, (Wong, Abstract Figs. 1, 2; col. 3, line 60 - col. 4, line 15),

an image output means which outputs the image data to be examined as a visible image, (Wong, Abstract Figs. 1, 2; col. 3, line 60 - col. 4, line 15),,

a diagnosis input means for inputting individual diagnoses obtained on the basis of visible images, (Wong, Abstract Figs. 1, 2; col. 3, line 60 - col. 4, line 15),, and

a data sending means which sends the individual diagnoses input through the diagnosis input means to the server, (Wong, Abstract Figs. 1, 2; col. 3, line 60 - col. 4, line 15).

8. As per claim 7, Wong discloses a medical image reading system in which client is connected by way of a network to a server provided with an image storage means which stores image data to be examined and a result storage means which stores results of examination obtained on the basis of the individual diagnoses, and comprises

a data receiving means which receives results of examination from the server, (Wong, Fig. 2; col. 9, line 34-63; col. 13, lines 26-62) (disclosing well-known client/server architecture and object-oriented formats that would send information

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including diagnostic images and associated results for transmission to a management client in the form of an Object Request Broker), and

a result output means which outputs the results of examination received by the data receiving means, (Wong, Fig. 2; col. 9, line 34-63; col. 13, lines 26-62).

9. As per claim 8, Wong discloses a system in which said data receiving means is further provided with an information output means which receives information to the effect that the server has received a predetermined number of said diagnoses from the server and outputs the same, (Wong, Fig. 2; col. 9, line 34-63; col. 13, lines 26-62) (disclosing well-known client/server architecture and object-oriented formats that would send information including the number of diagnostic images and associated results).

10. As per claim 9, Wong discloses a server for a medical image reading system in which server is connected by way of a network to a plurality of diagnostic client and at least one management client and comprises

an image storage means which stores image data to be examined, (Wong, Abstract Figs. 1, 2; col. 9, line 34 - col. 10, line 27),

a data sending means which sends the image data stored in the image storage means to the diagnostic clients, (Wong, Abstract Figs. 1, 2; col. 9, line 34 - col. 10, line 27),

a data receiving means which receives from the diagnostic clients individual diagnoses obtained on the basis of the image data to be examined, (Wong, Abstract Figs. 1, 2; col. 9, line 34 - col. 10, line 27), and

a result storage means which stores results of examination obtained on the basis of the individual diagnoses with the results of examination related to the image data to be examined, (Wong, Abstract Figs. 1, 2; col. 9, line 34 - col. 10, line 27), wherein

said data sending means is further provided with a function of sending to the management clients the results of examination stored in the result storage means, (Wong, Fig. 2; col. 9, line 34-63; col. 13, lines 26-62) (disclosing well-known client/server architecture and object-oriented formats that would send information including diagnostic images and associated results for transmission to a management client in the form of an Object Request Broker).

11. As per claim 10, Wong discloses a server in which said data sending means is further provided an information sending means which sends to the management client information to the effect that the server has received a predetermined number of said diagnoses, (Wong, Fig. 2; col. 9, line 34-63; col. 13, lines 26-62) (disclosing well-known client/server architecture and object-oriented formats that would send information including the number of diagnostic images and associated results for transmission to a management client in the form of an Object Request Broker).

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12. As per claim 17, Wong discloses a medical image reading method comprising the steps of

storing image data to be examined in a server which is provided at a place remote from a plurality of diagnostic clients and connected to the diagnostic clients by way of a network, (Wong, Fig. 2; col. 9, line 34-63; col. 13, lines 26-62),

causing each of the diagnostic clients to receive a desired piece of image data out of the image data stored in the server and to output the desired piece of image data as a visible image, (Wong, Abstract Figs. 1, 2; col. 9, line 34 - col. 10, line 27),

inputting individual diagnoses obtained on the basis of the output visible image through the diagnostic clients, (Wong, Abstract, col. 3, lines 30-60; col. 11, lines 29-48) (disclosing processing of various diagnostic images for the purpose of diagnosis by a client/user, such as X-ray, MRI, ultrasound, etc.),

sending the individual diagnoses to the server, storing in the server results of examination obtained on the basis of the individual diagnoses sent thereto with the results of examination related to the pieces of image data, (Wong, Fig. 2; col. 9, line 34-63), and

causing a management client to receive the result of examination for a desired piece of image data stored in the server and to output the same, (Wong, Fig. 2; col. 9, line 34-63; col. 13, lines 26-62) (disclosing well-known client/server architecture and object-oriented formats that would send information including diagnostic images and associated results for transmission to a management client in the form of an Object Request Broker).

13. As per claim 18, Wong discloses a medical image reading method further comprising the step of causing the server, when the server receives all the diagnoses, to send information to the effect that the server has received all of said diagnoses to the management client, (Wong, Fig. 2; col. 9, line 34-63; col. 13, lines 26-62) (disclosing well-known client/server architecture and object-oriented formats that would send information including the number of diagnostic images and associated results for transmission to a management client in the form of an Object Request Broker).

14. As per claim 33, Wong discloses a program for causing a computer to execute processing of sending medical image data to a sever by way of a network,
processing of sending a request for receiving a desired piece of medical image data out of image data stored in the server to the server, (Wong, col. 6, lines 1-55), and
processing of outputting as a visible image the desired piece of medical image data, (Wong, col. 6, lines 1-55).

15. As per claim 53, Wong discloses a program for causing a computer to execute processing of sending a request for receiving medical image data related to a predetermined examination out of image data stored in a sever by way of a network to the server, (Wong, col. 6, lines 1-55),
processing of receiving medical image data as requested by the request for receiving medical image data, (Wong, col. 6, lines 1-55), and

processing of outputting as a visible image the medical image data received,
(Wong, col. 6, lines 1-55).

16. As per claim 54, Wong discloses a program for causing a computer to further execute

processing of sending, to the server, purpose information representing the purpose of examination together with the request for receiving medical image data related to the predetermined examination, (Wong, col. 6, lines 1-55, col. 11, lines 29-48)(patient visit information is considered to be purpose information), and

processing of receiving medical image data related to the predetermined examination within an available range determined purpose by purpose on the basis of the purpose information, (Wong, col. 6, lines 35-55) (available range is considered to be search results within request criteria).

17. **Claims 3, 4, 6, 11, 12, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al., (U.S. 6,260,021), in view of Marchosky, (U.S. 2002/0029157).**

18. As per claim 3, Wong fails to disclose a medical image reading system in which said server further comprises an automatic determination means which automatically makes examination for a given piece of image data on the basis of all or part of the

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individual diagnoses received and outputs result of examination. However, such a system is well-known in the art as evidenced by Marchosky, (Marchosky, Abstract, Fig. 2B, 2C, 4D: ¶¶ 79-82) (disclosing an automatic determination means for examining image data).

It would have been obvious to one of ordinary skill in the art to combine Wong and Marchosky. The motivation would have been to allow weighted diagnostic program information, including imaging, to be incorporated in to a computerized medical record database, (Marchosky, Abstract; Fig. 4D).

19. As per claim 4, Wong fails to disclose a medical image reading system in which, each of the diagnostic clients is provided with a function of sending data on the doctor in charge together with the relevant individual diagnosis to the server so that the automatic determination means makes examination weighting the individual diagnoses according to the doctor in charge. However, such a system is well-known in the art as evidenced by Marchosky, (Marchosky, Abstract, Fig. 3: ¶¶ 75-78, 91) (disclosing weighting diagnostic information and storing information related to the doctor in charge).

It would be obvious to one of ordinary skill in the art to modify Marchosky in order to weight variables according to the doctor in charge. The motivation would have been to eliminate any bias in the results, (Marchosky, ¶¶ 94).

20. As per claim 6, Wong fails to disclose a diagnostic client in which said data sending means sends data on the doctor in charge together with the relevant individual

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diagnosis to the server. However, such a diagnostic client is well-known in the art as evidenced by Marchosky, (Marchosky, ¶ 91).

21. As per claim 11, Wong fails to disclose a server in which said data sending means is further provided with an automatic determination means which automatically makes examination for a given piece of image data on the basis of all or part of the individual diagnoses received and outputs result of examination. However, such a server is well-known in the art as evidenced by Marchosky, (Marchosky, Abstract, Fig. 2B, 2C, 4D: ¶ 79-82) (disclosing an automatic determination means for examining image data).

22. As per claim 12, Wong fails to disclose a server in which said data receiving means receives data on the doctor in charge together with the relevant individual diagnosis from the diagnostic client, and the automatic determination means makes examination weighting the individual diagnoses according to the doctor in charge. However, such a server is well-known in the art as evidenced by Marchosky, (Marchosky, Abstract, Fig. 3: ¶ 75-78, 91) (disclosing weighting diagnostic information and storing information related to the doctor in charge).

It would be obvious to one of ordinary skill in the art to modify Marchosky in order to weight variables according to the doctor in charge. The motivation would have been to eliminate any bias in the results, (Marchosky, ¶ 94).

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23. As per claim 19, Wong fails to disclose a medical image reading method as in which the result of examination is weighted by individual diagnoses. However, such a method is well-known in the art as evidenced by Marchosky, (Marchosky, Abstract, Fig. 3: ¶ 75-78, 91) (disclosing weighting diagnostic information).

It would be obvious to one of ordinary skill in the art to modify Marchosky in order to weight variables as claimed. The motivation would have been to eliminate any bias in the results, (Marchosky, ¶ 94).

Response to Arguments

Applicant's arguments filed October 5, 2006 have been fully considered but they are not persuasive for the following reasons:

1. Please refer to the above claim rejections under 35 U.S.C. 112 addressing applicant's arguments on this issue.
2. As per applicants argument that Wong and /or Marchosky fails to teach that each computer receives the same image data, it is noted that the features upon which applicant relies (i.e., same image data, single examination image) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

3. As per applicant's argument that Wong fails to disclose that "each of the diagnostic clients receives the image data to be examined and sends the individual diagnosis input through the diagnosis input means", it is submitted that Wong in fact discloses these features. Wong discloses diagnostic clients because Wong discloses transferring information regarding a broad range of diagnostic healthcare activities, such as images and data for clinical observations and orders, (Wong, col. 2, lines 40-51). Wong also discloses a diagnosis input means in the form of a scalable system and method incorporating one or more computer systems as a diagnosis input means, and medical image data from one or more existing storage systems, (Wong, col. 3, lines 23-29; col. 4, lines 16-30).
4. As per applicant's argument that Wong fails to disclose processing of sending medical image data related to a predetermined examination of image data stored in a server by way of a network, it is submitted that Wong discloses this feature, (Wong, col. 1, lines 5-11).
5. As per applicant's argument that the combination of Wong and/or Marchosky fail to disclose a function of sending data on the doctor in charge to the server, it is submitted that Wong discloses this limitation in the form of user access authorization and preferences based data sent to the server to confirm the identity of the user, (Wong, col. 3, lines 46-50).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to [redacted] whose telephone number is 571-272-3132. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 571-272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RSG
12/7/2006

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~~JOSEPH THOMAS~~
~~SUPERVISORY PATENT EXAMINER~~


JOSEPH THOMAS
SUPERVISORY PATENT EXAMINER